HUMAN FACTORS FATIGUE EDUCATIONAL MATERIALS

Question #34: Has the FAA made educational materials regarding fatigue countermeasures available to operational air traffic controllers?

Yes, materials have been distributed and other information is being developed. In 1999, the Volpe National Transportation Systems Center was funded by the FAA to develop a booklet entitled "Human Factors for Air Traffic Control Specialists: A User's Manual for Your Brain". Issues about fatigue are addressed in Chapter 4, "Fatigue Busters, Tips for Sleeping Better and Maintaining Alertness on the Job". Research conducted by the Civil Aeromedical Institute (CAMI) in 1997 was used as a resource for development of the chapter. The booklet is now ready for distribution to the Air Traffic Controller workforce . Additionally, a description of the FAA's fatigue research program was published in the 1999 Department of Transportation (DOT) brochure entitled "Partnering for Safety – Managing Fatigue". This publication is in distribution through the DOT.

The FAA continues research into the extent of fatigue in the Air Traffic Controller workforce due to shift scheduling patterns, as requested by Congress. There are two components of this research. A survey has been completed and data are being analyzed. A follow-up field study will validate survey findings. The project involves coordination with an international panel of medical researchers and other experts relative to the current knowledge base of shiftwork and fatigue, as well as collaboration with a special working group under the auspices of Article 55 (Human Factors) of the NATCA Bargaining Agreement. This research project will result in fatigue countermeasures targeted at specific observed patterns of fatigue, and educational materials will be disseminated to the workforce.

A consortium of human factors researchers at CAMI, the US Air Force, and from Japan completed an assessment of the effects of bright lights as a potential fatigue countermeasure for personnel working midnight shifts. CAMI researchers also completed development of a database of information gathered from field facilities (en route and terminal) to better define the types of shift schedules utilized at ATC facilities. This work will be incorporated in the development of a CD-ROM for training of ATC and other personnel regarding the effects of shift work and fatigue on performance, and the development of countermeasures to reduce the effects of fatigue associated with rotating shift schedules.